IN THE CLAIMS:

1. (Original): In an Asynchronous Transfer Mode (ATM) system composed of at least a first data network (10) comprising a plurality of switching nodes interconnected by connection lines and including end switching nodes each being connected to at least a Data Transmission equipment (DTE) and being used either as an entry border node (22) when it is connected to a source DTE (18) or an exit border node (28) when it is connected to a destination DTE (20), said network using a routing protocol of the type wherein a best route between a source DTE and a destination DTE is determined in a control point associated with said entry border node to which is connected said source DTE and wherein a set-up message is sent by said entry border node, and a second data network (12) including at least one DTE to be used as destination DTE in an exchange of data with a source DTE connected to said first data network and being interconnected with said first data network by means of at least two links (14, 16) not supporting said routing protocol; method for extending the crankback procedure over all said system consisting, when the exit border node of said first data network receives a clearing message on one of said links indicating that said set-up message has been rejected because said best route is blocked anywhere in said second data network, in building a crankback information element to be added to said clearing message for enabling said entry border node to find an alternate route avoiding the portion of said best route which is blocked.

2. (Original): The method according to claim 1, wherein said crankback information element includes a blocked transit type which can be "preceding", "node" or "succeeding", a blocked transit identifier depending on said blocked transit type and a crankback cause.

3. (Original): The method according to claim 2, wherein said blocked transit type is "preceding" and said blocked transit identifier identifies the node preceding the link not supporting said routing protocol as being blocked.

4. (Original): The method according to claim 1, 2 or 3, wherein said links not supporting said routing protocol are Interim Inter switch Protocol (IISP) links.

5. (Original): The method according to claim 1, 2 or 3, wherein said links not supporting said routing protocol are UNI links.

6. (Original): Asynchronous Transfer Mode (ATM) system composed of at least a first data network (10) comprising a plurality of switching nodes interconnected by connection lines and including end switching nodes each being connected to at least a Data Transmission equipment (DTE) and being used either as an entry border node (22) when it is connected to a source DTE (18) or an exit border node (28) when it is connected to a destination DTE (20), said network using a routing protocol of the type wherein a best route between a source DTE and a destination DTE is determined in a control point associated with said entry border node to which is connected said source DTE and wherein a set-up message is sent by said entry border node, and a second data network (12) including at least one DTE to be used as destination DTE in an exchange of data with a source DTE connected to said first data network and being interconnected with said first data network by means of at least two links (14, 16) not supporting said routing protocol; said system further comprising means for extending the crankback procedure over all said system in building, when the exit border node of said first data network receives a clearing message on one of said links indicating that said set-up message has been rejected because said best route is blocked anywhere in said second data network, a crankback

information element to be added to said clearing message for enabling said entry border node to find an alternate route avoiding the portion of said best route which is blocked.

7. (Original): The system according to claim 6, wherein said crankback information element includes a blocked transit type which can be "preceding", "node" or "succeeding", a blocked transit identifier depending on said blocked transit type and a crankback cause.

8. (Original): The system according to claim 7, wherein said blocked transit type is "preceding" and said blocked transit identifier identifies the node preceding the link not supporting said routing protocol as being blocked.

9. (Original): The system according to claim 6, 7 or 8, wherein said links not supporting said routing protocol are Interim Inter switch Protocol (IISP) links.

10. (Original): The system according to claim 6, 7 or 8, wherein said links not supporting said routing protocol are UNI links.

11. (Original): For use in a system having a first network and a second network, said first network having at least one entry border node connected to a source node, said first network adhering to a routing protocol which includes the use of a crankback procedure to inform the entry border node of a path failure within the first network, said second network having at least one exit border node connected to a destination node, said second network including at least some elements which do not use a crankback procedure, said first and second networks being interconnected through a plurality of links connecting a plurality of border nodes within each network, a method of extending the crankback pro-

cedure to cover path failures in said second network, said method being implemented in a border node in said first network on a proposed path between the source node and the destination node and comprising the steps of:

monitoring messages returned from the second network relating to the proposed path for a clearing message indicative of a failure in the proposed path anywhere in the second network;

in response to detection of said clearing message, generating a crankback information element;

modifying said clearing message by adding said generated crankback information element; and

forwarding said modified clearing message to the entry border node.

12. (Original): The method according to claim 11 wherein said crankback information element includes a blocked transit type field, a blocked transit identifier field and a crankback cause field.

13. (New): A method for use in an exit border node in a first network of a system having a first and second network using a best-route routing protocol interconnected by at least two links not supporting said protocol, said exit border node being connected to one of said at least two links, said first network having an entry border node to determine a best route, said method comprising:

receiving a clearing message from said second network indicating a rejection of said best route;

generating a crankback information element in response to said clearing message;

adding said crankback information element to said clearing message; and

forwarding said clearing message and crankback information element to said entry border node.

14. (New): The method of claim 13, further comprising: wherein said at least two links are Interim Inter Switch Protocol (IISP) links.

15. (New): The method of claim 13, further comprising: wherein said at least two links are User-Network-Interface (UNI) links.

16. (New): The method of claim 13, further comprising: wherein said system is an Asynchronous Transfer Mode (ATM) system.

17. (New): The method of claim 13, further comprising: wherein said a best-route routing protocol is a Private Network Network Interface (PNNI) protocol.

18. (New): The method of claim 13, further comprising: wherein said crankback information element includes a blocked transmit type field, a blocked transmit identifier field, and a crankback cause field.

19. (New): An exit border node in a first network of a system having a first and second network using a best-route routing protocol interconnected by at least two links not supporting said protocol, said exit border node being connected to one of said at least two links, said first network having an entry border node to determine a best route, said exit border node comprising:

means for receiving a clearing message from said second network indicating a rejection of said best route;

means for generating a crankback information element in response to said clearing message;

means for adding said crankback information element to said clearing message; and

means for forwarding said clearing message and crankback information element to said entry border node.

20. (New): A system, comprising:

a first network using a best-route routing protocol;

at least two links not supporting said protocol connected to said first network;

a second network using a best-route routing protocol, said second network interconnected with said first network by said at least two links;

an entry border node in said first network to send a set-up message having a best route from said first network to said second network;

an exit border node in said first network connected to one of said at least two links, said exit border node to receive a clearing message from said second network indicating a rejection of said best route, generate a crankback information element in response to said clearing message, add said crankback information element to said clearing message, and forward said clearing message and crankback information element to said entry border node.

21. (New): The system of claim 20, further comprising: wherein said at least two links are Interim Inter Switch Protocol (IISP) links.

22. (New): The system of claim 20, further comprising: wherein said at least two links are User-Network-Interface (UNI) links.

23. (New): The system of claim 20, further comprising: wherein said system is an Asynchronous Transfer Mode (ATM) system.

24. (New): The system of claim 20, further comprising: wherein said a best-route routing protocol is a Private Network Network Interface (PNNI) protocol.

25. (New): The system of claim 20, further comprising: wherein said crankback information element includes a blocked transmit type field, a blocked transmit identifier field, and a crankback cause field.

26. (New): In a system having a first and second network using a best-route routing protocol interconnected by at least two links not supporting said protocol, a method comprising:

sending a set-up message from an entry border node of said first network to said second network over one of said at least two links, said set-up message having a best route;

receiving a clearing message at an exit border node of said first network from said second network indicating a rejection of said best route;

generating, at said exit border node, a crankback information element in response to said clearing message;

adding said crankback information element to said clearing message;

forwarding said clearing message and crankback information element from said exit border node to said entry border node; and

determining, at said entry border node, an alternate route over another of said at least two links, thereby avoiding said rejected portion of said best route.

27. (New): A computer readable media, comprising: said computer readable media containing instructions for execution in a processor for the practice of the method of claim 1, or claim 11, or claim 13, or claim 26.

28. (New): Electromagnetic signals propagating on a computer network, comprising: said electromagnetic signals carrying instructions for execution on a processor for the practice of the method of claim 1, or claim 11, or claim 13, or claim 26.